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10/789,435	02/27/2004	Adrian Buckley	1578.702 (11609-US-PAT)	5695
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/789,435

Applicant(s)

BUCKLEY ET AL.

Examiner

Sam Bhattacharya

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-10,13 and 16-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-10,13 and 16-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 7-10, 13, 16, 18-23, 25-28, 30, 31, 33-35, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch et al. (US 2004/0028009) in view of H'mimy et al. (US 6,442,151).

Regarding claims 1, 10, 21, 22 and 26, Dorenbosch discloses a mobile device for wireless channel selection (see FIGS. 1 and 2), the mobile device 103 communicating with a wireless network, including a first transceiver 808 for creating a first connection with the wireless network over a first channel; a second transceiver 809 for creating a second connection with the wireless network over a second channel; a memory, the memory 815 containing a list of candidate channels and their characteristics and containing service criteria associated with a service; and a switching module 811 coupled to the first and second transceivers, the switching module directing the first transceiver to create the first connection, establishing the service between the mobile device and a remote point over the first connection, selecting the second channel, and directing the second transceiver to create the second connection. See also FIG. 8, paragraph 16, lines 1-12, and paragraph 19, lines 1-21.

Dorenbosch fails to disclose that the switching module reads the list of candidate channels and compares their characteristics against the service criteria to select the second

channel and wherein the switching module switches the service from the first connection to the second connection.

However, in an analogous art, H'mimy et al. discloses a channel assignment system that includes a switching module 30 that reads the list of candidate channels and compares their characteristics against the service criteria to select the second channel and wherein the switching module switches the service from the first connection to the second connection. See FIG. 1, col. 3, lines 23-35 and col. 6, lines 18-34. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system in Dorenbosch by incorporating this feature as taught by H'mimy for the purpose of ensuring that the optimal channel is selected for communication so that communication is not dropped.

Regarding claims 5, 16, 23, 28, 31 and 35, Dorenbosch discloses that the characteristics include bandwidth and the service criteria include a minimum bandwidth requirement. See paragraph 21, lines 1-16.

Regarding claims 7, 18, 25, 30, Dorenbosch discloses that the characteristics of the second channel do not meet the service criteria, and wherein the method includes a step of adapting the service to the characteristics of the second channel. See paragraph 19, lines 1-18.

Regarding claims 8, 19, 34 and 38, Dorenbosch discloses that the step of creating a second connection includes steps of selecting the second channel and requesting resources from the wireless network. See paragraph 17, lines 1-19 and paragraph 18, lines 1-21.

Regarding claims 9 and 20, Dorenbosch discloses that the wireless network includes an anchor point and wherein the first connection includes a first path to the anchor point, and

wherein the step of creating a second connection includes establishing a second path to the anchor point. See paragraph 25, lines 1-22.

Regarding claim 13, 33 and 37, Dorenbosch discloses that the switching module directs the first transceiver to terminate the first connection once the service is switched to the second connection. See paragraph 23, lines 1-20.

3. Claims 6, 17, 24, 29, 32 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of H'mimy et al. and Boudreaux (US 6,466,556).

Regarding claims 6, 17, 24, 29, 32 and 36, Dorenbosch fails to disclose that the characteristics for channel evaluation include latency and the service criteria include a latency requirement.

However, in an analogous art, Boudreaux discloses a handover method in which service criteria for channel evaluation include a latency requirement. See col. 1, lines 47-60. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system in Dorenbosch by including this feature taught in Boudreaux for the purpose of compensating for rapid fluctuations in delay and loss.

#### ***Response to Arguments***

4. Applicant's arguments filed 10/4/07 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with Applicant's arguments. As to Applicant's arguments with respect to H'Mimy, the claims of the present application do not recite a service

that has a set of service characteristics or criteria that are evaluated to determine if the interference level of a given channel is sufficient to support that service. The claims also do not recite wireless channel selection initiated and controlled by a mobile device and within a level three awareness of the service criteria associated with the active service operating over the first connection. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner suggests that applicant amend the claims to recite these features in order to give them patentable weight.

H'Mimy is a secondary reference in the rejections above, and is not relied upon to teach a service criteria associated with a service and a method performed by a mobile device. The primary reference, Dorenbosch, is relied upon to teach these features. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Moreover, the claims do not recite that switching the service to the second connection is performed by the mobile device.

H'Mimy discloses the steps of measuring an interference level for each of the plurality of channels, assigning each of the plurality of channels to an interference band, preassigning a first channel to a service, measuring the channel quality of the first channel and reassigning the service from the first channel to a second channel when the channel quality of the first channel becomes unsatisfactory, such that the second channel is selected based on the interference level and channel quality of the first channel using variable reassignment. See col. 3, lines 22-35.

Accordingly, contrary to Applicant's assertion, H'Mimy clearly teaches selection of a second channel by evaluating channel characteristics against service criteria (the interference level) associated with the service established over a first connection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one skilled in the art would have been motivated to combine Dorenbosch and H'Mimy because they are in the field of mobile phone technology and the purpose for the combination is ensuring that the optimal channel is selected for communication so that communication is not dropped.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sb

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER